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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,456	01/30/2006	Roberto Cavazzoni	BUG-39439	5587
116 7590 07/10/2008 PEARNE & GORDON LLP 1801 EAST 9TH STREET SUITE 1200 CLEVELAND, OH 44114-3108				
EXAMINER				
LE, DINH THANH				
ART UNIT		PAPER NUMBER		
2816				
MAIL DATE		DELIVERY MODE		
07/10/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/566,456

**Applicant(s)**

CAVAZZONI, ROBERTO

**Examiner**

DINH T. LE

**Art Unit**

2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 201-234 and 236-238 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 201-223, 230 and 231 is/are allowed.
- 6) ☒ Claim(s) 224-229, 233 and 234 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 235 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***NON-FINAL REJECTION***

Claim 235 should be canceled in accordance with the Selection filed 4/29/2008.

Correction is required.

The new prior art references necessitated a new ground of rejection as below:

***Claim Rejections***

***Claim Rejections - 35 USC § 112***

Claims 224-229 and 232-234 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Correction or clarification is required.

In claim 224, it is not understood what the "first predetermined" on line 30 and a fixed potential node" on line 36 are and how they are read on the preferred embodiment or seen on the drawings. The same is true for claims 225 and for reciting "a first predetermined of said first and third operational amplifier" on line 35-36 of claims 233-234.

In claim 229, it is unclear how the recitation "a resistor (12) coupled to the noninverting input" on lines 1-2 is read on the preferred embodiment or seen on the drawings.

The remaining claims are dependent from the above claims and therefore also considered indefinite.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 233-234 are rejected under 35 USC 103 (a) as being unpatentable over Erfinder (PCT/EP88/00454) in view of Ikeda et al (US 5,886,580).

As the best construed, Erfinder discloses in Figure 1 a filter circuit comprising:

- a first stage (O1, R1, R3);
  - a second stage (O2, R4, R7);
  - a third stage (O3, R8, R10); and
  - a main feedback branch (R6).
- However, Erfinder fails to suggest a resistor coupled between the inverting input of the first amplifier or the third amplifier and a fixed potential node.
- Nevertheless, Ikeda et al suggests to connect a resistor (20) between the inverting terminal of an operational amplifier (12) and ground in Figure 1 for limiting the input voltage introduced to the inverting input.
- It would have been obvious to a person having skill in the art at the time the invention was made to employ the resistor as suggested by Ikeda et al in first or amplifier or the third amplifier of Erfinder for the purpose of limiting the voltage at the inverting of the amplifier.

#### ***Allowable Subject Matter***

Claims 201-223, 230-231 and 236-238 are allowed because the prior art of record does not disclose the "fourth operational amplifier" as combined in claims 201, 208, 211, 219, 221

Claims 224-229 and 232 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

The claims are allowable since the prior art of record fails to suggests "fourth amplifier" as combined in claims 210 , 208, 211 , , 219, 221, 224 and 236.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DINH T. LE whose telephone number is (571) 272-1745. The examiner can normally be reached on Monday-Friday (8AM-7PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Richards, can be reached at (571) 272-1736.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/DINH T. LE/

Primary Examiner, Art Unit 2816

